

CHEMICAL ENGINEERING

UNIVERSITY of WASHINGTON

MASTER OF SCIENCE

DATA SCIENCE TRACK

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The data science revolution is here. UW ChemE is at the forefront.

ChemE master's students at the UW receive applied data science instruction — paired with real-world project experience — in a chemical engineering and molecular science context

Why ChemE and data science?

To be competitive in today's workforce and academic environments, chemical engineers need to understand how to efficiently manage, process, and respond to an ever-expanding stream of data from industrial sensors, robotics, and advanced instrumentation.

Rigorous coursework

Designed to be completed in as little as 10 months, the master's curriculum includes graduate-level work in key areas of chemical engineering, with additional focus on:

- machine learning
- computational molecular science
- Python scientific programming
- statistics
- cloud and high-performance computing

Portfolio-building capstone project

Students complete their training with a team-based capstone project to cement their skills and propel them to workforce success. Each capstone addresses a specific data science challenge of an external industry partner, nonprofit, national lab, or UW research team.

Recent projects include:

- Measuring eutectic solvents' melting points with high-throughput infrared image processing
- Predicting impurity energy levels of semiconductors using machine learning
- Characterizing proteins with neural networks

Who should apply?

We welcome students with undergraduate degrees in chemical engineering or another related STEM field such as physics and chemistry



Learn more and apply
cheme.washington.edu